

CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this correspondence is being filed electronically with the U.S. Patent and Trademark Office on the below date:

Date: August 20, 2007 Name: Tadashi Horie (Reg. No. 40,437) Signature: 

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Dai KAMIYA et al.

Appln. No.: 10/684,968

Filed: October 14, 2003

For: COMMUNICATION DEVICE,
PROGRAM AND RECORDING
MEDIA

Examiner: Nguyen, Khoi

Art Unit: 2132

Confirmation No. 9952

Attorney Docket No: 9683/160

AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Responsive to the Office Action mailed February 23, 2007, Applicants respectfully request reconsideration in light of the following Amendments and Remarks.

Amendments to the Claims are reflected in the listing of claims that begins on page 2 of this communication.

Remarks begin on page 5 of this communication.

Claims:

1-6 (canceled)

7.(New) A data processing device comprising:
 a memory that stores one or more data sets and programs including one or more applications; and
 a processor that executes the programs to function as
 an object generator that generates an object containing one or more methods indicating procedures of operation using at least one of the one or more data sets, the one or more methods being called and executed by the processor following an application stored in the memory,
 a data access manager that prohibits any access to the one or more data sets by the processor following an application stored in the memory without calling and following a method contained in an object generated by the object generator, and
 an object generation manager that allows the object generator to generate, following one application among the one or more applications, an imperfect encapsulated object that is an object containing a method indicating procedures of operation making a specific data set among the one or more data sets accessible by the processor following any one of the one or more applications, only when reliability of the one application meets a predetermined requirement.

8.(New) The data processing device according to claim 7, wherein
 the memory stores reliability information indicating degree of reliability of each of the one or more applications, and
 the object generation manager allows the object generator to generate an imperfect encapsulated object on the reliability information stored in the memory.

9.(New) The data processing device according to claim 7, further comprising:

a communication interface that receives from a server reliability information indicating degree of reliability of each of the one or more applications; wherein the object generation manager allows the object generator to generate an imperfect encapsulated object on the reliability information received by the communication interface.

10.(New) The data processing device according to claim 7, wherein the object generator generates a perfect encapsulated object that is an object containing no method indicating procedures of operation making the specific data set accessible by the processor following any one of the one or more applications, when the object generator is not allowed by the object generation manager to generate the imperfect encapsulated object.

11.(New) The data processing device according to claim 7, wherein the object generation manager allows the object generator to generate the imperfect encapsulated object only when importance of the specific data set meets a predetermined requirement.

12.(New) The data processing device according to claim 7, wherein the data access manager does not prohibit access to the one or more data sets by the processor without calling and following a method contained in an object generated by the object generator when the processor follows an application that is preinstalled in the memory.

13.(New) The data processing device according to claim 7, wherein the data access manager allows the processor to access only data sets that are stored in a memory area allotted to the one application or in a memory area allotted to all of the one or more applications, when the processor follows the one application.

14.(New) The data processing device according to claim 7, wherein

at least one of the one or more applications is described as a set of intermediate codes required to be converted into executable codes before execution, and

the processor that executes the programs stored in the memory to further function as a converter that converts an application described as a set of intermediate codes into executable codes.

REMARKS

Status of the Claims

Claims 1-6 have been cancelled, and new claims 7-14 have been added in which claim 7 is an independent claim.

Supports for the new claims

The data recessing device of claim 7 corresponds to mobile phone 40 in the embodiment.

The memory of claim 7 corresponds to memory unit 407 in the embodiment, and it is disclosed, for example, in lines 1-16 of page 7 of the specification.

The processor of claim 7 corresponds to CPU 405 in the embodiment.

The object generator of claim 7 corresponds to a part of the function of generating objects of JAM in the embodiment, and it is disclosed, for example, in lines 11-19 and 25-29 of page 10, lines 1-5 of page 11, and lines 3-4 of page 16, of the specification.

The data access manager of claim 7 corresponds to the function of managing data access of JAM in the embodiment, and it is disclosed, for example, in lines 11-19 and 25-29 of page 10, lines 1-13 of page 11, and lines 12-22 of page 12, of the specification.

The object generation manager of claim 7 corresponds to a part of the function of generating objects of JAM in the embodiment, and it is disclosed, for example, in lines 2-6 of page 16, and lines 4-29 of page 17, of the specification.

The reliability information of claims 8 and 9 corresponds to the trusted application identifier in the embodiment, and it is disclosed, for example, in lines 5-24 of page 8, lines 25-29 of page 21, and line 1 of page 22, of the specification.

The features of claim 8 are disclosed, for example, in lines 12-18 of page 17 of the specification.

The features of claim 9 are disclosed, for example, in lines 18-29 of page 27, and lines 1-7 of page 28, of the specification.

The features of claim 10 are disclosed, for example, in lines 12-29 of page 12, lines 1-11 of page 13, and lines 19-29 of page 17, of the specification.

The features of claim 11 are disclosed, for example, in lines 17-21 of page 21, lines 4-22 of page 22, lines 25-29 of page 23, and lines 1-9 of page 24, of the specification.

The features of claim 12 are disclosed, for example, in lines 18-21 of page 7, lines 12-29 of page 16, and lines 1-3 of page 17, of the specification.

The features of claim 13 are disclosed, for example, in lines 25-29 of page 8, and lines 1-9 of page 9, of the specification.

The features of claim 14 are disclosed, for example, in lines 8-17 of page 15 of the specification.

Claim Rejections Under 35 USC 112

With regard to the rejection under 35 USC §112, the problem relating to lack of clarity has been solved in the amended claims.

Claim Rejections Under 35 USC 103

With regard to the rejection under 35 USC §103, the applicant respectfully argues that the present invention described in the amended claims are patentable over any combination of the citations Jguru, Lipkin, and Underwood.

Jguru discloses introductory information of CORBA, that is a standard for enabling a terminal to execute an application that requires an object that is not locally stored at the terminal, by letting the terminal access reference data stored at a server via a network, the reference data indicating storage locations of objects in the network, to obtain storage location information of the required object, and obtain the required object by use of the storage location information.

In connection with the present invention, Jguru discloses a sample code defining a class of an object corresponding to an imperfect encapsulated object of the present invention.

Lipkin discloses a system where each of the objects that are accessible via a network are classified into domains having a hierarchical structure, and access right of each of the nodes in the network to each of the objects are determined on the basis of security list defining relationship between the domains.

In connection with the present invention, Lipkin discloses a storage unit that stores data, a processor that executes a program, and a method for fetching (obtaining) an object.

Underwood discloses a system for enabling a global internetworking.

The applicant cannot find any relevance between the present invention and Underwood except that both of the inventions relate to management of data access.

In the office action, it is stated that the idea of 'the high, medium, and low level of reliability' of the present invention was disclosed in col. 204, lines 55-57 of Underwood. Actually, Underwood discloses in col. 204, lines 55-57 that a priority of change request for requesting a change in an e-commerce system of Underwood is categorized into any one of 'high', 'medium', 'low', and 'cosmetic'. Namely, Underwood discloses priority of a request among plural requests that is substantially different from a degree of reliability of an application of the present invention.

None of Jguru, Lipkin, and Underwood discloses nor suggests the features of the object generation manager of claim 7 of the present invention. More specifically, the object generation manager of the present invention allows the object generator to generate an imperfect encapsulated object only when reliability of the application requesting the generation of the object meets a predetermined requirement. In short, in the present invention, based on reliability of an application requesting a generation of an object, it is determined whether the object can be an imperfect object or not. Jguru, Lipkin, and Underwood are silent about the idea of the present invention.

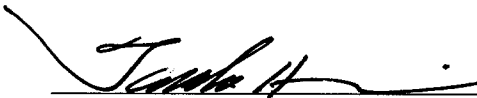
Accordingly, claim 7, and claims 8-14 that are dependent on claim 7, are patentable over Jguru, Lipkin, and Underwood.

Respectfully submitted,

August 20, 2007

Date

BRINKS HOFER GILSON & LIONE
P.O. Box 10395
Chicago, IL 60610
(312) 321-4200


Tadashi Horie (Reg. No. 40,437)